

Scaled data based on original data using
LM-79-2019 Approved Method: Electrical and Photometric Measurements of Solid-
State Lighting Products

Test Report Prepared for
Cooper Lighting Solutions

Brand: CORELITE

Report Number: P938507

Luminaire Tested: SQ4-FB-150U-100D-B50-1D-UNV-W2A-W-6

Issue Date: 12/17/2024

Test Information

Test Method: LM-79-2019
Report Number: P938507
REPORT IS A COMBINATION OF REPORTS P933639 AND P933786
Test Lab: INNOVATION CENTER
Issue Date: 12/17/2024
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: CORELITE
Catalog Number: SQ4-FB-150U-100D-B50-1D-UNV-W2A-W-6
Description: CORELITE SQ4 SUSPENDED INDIRECT LED LUMINAIRE WITH Batwing Frosted Continuous Roll L
Light Source: -
Ballast/Driver: -

Summary

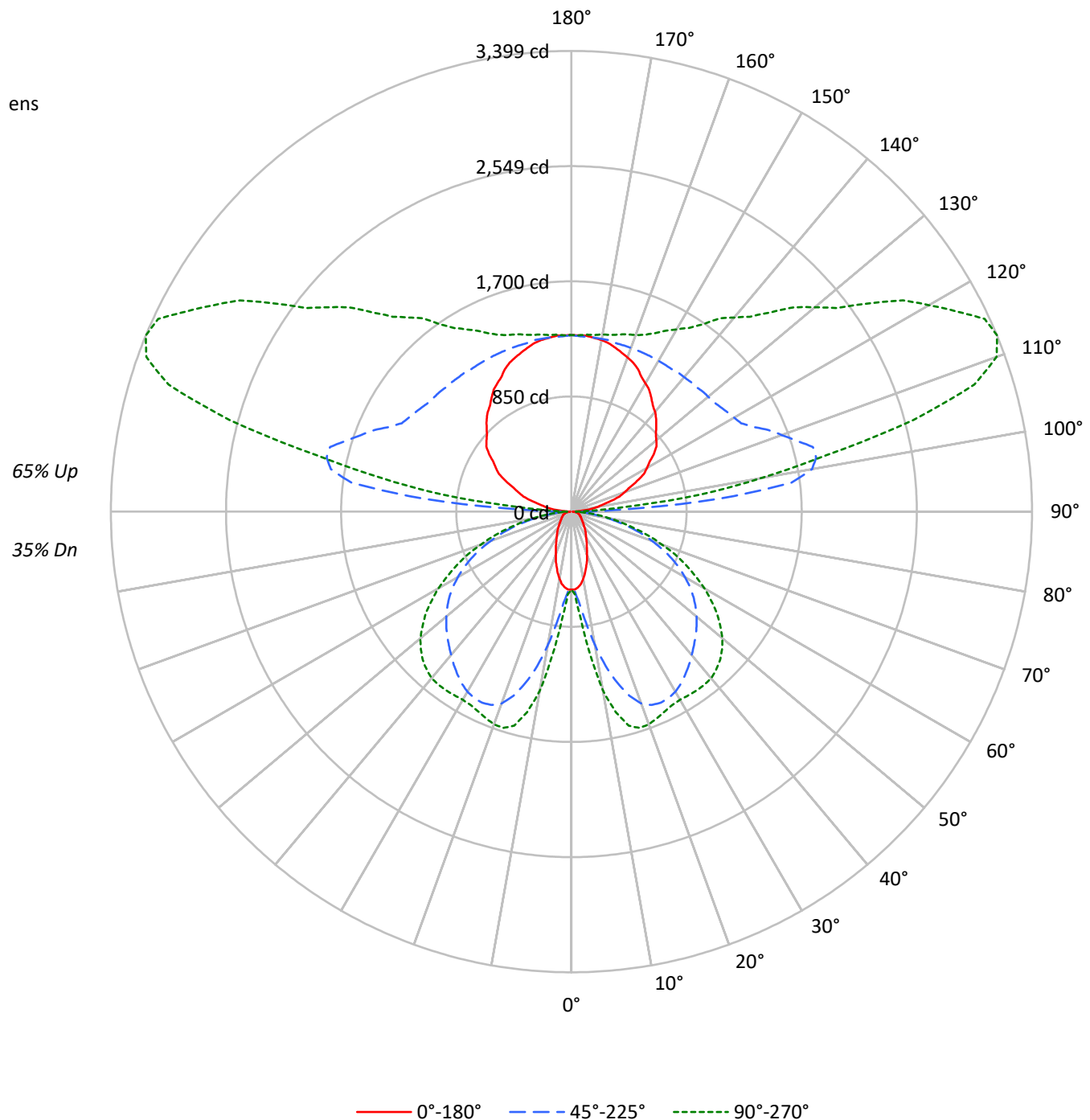
Lumens per Lamp: N/A
Luminaire Lumens: 12898.6 lumens
Efficiency: N/A
Efficacy: 118.8 lumens/watt
Spacing Criteria (0/90/45): 0.71 / 2.69 / 2.33
Luminous Opening: Rectangular w/ Sides (W: 0.29' x L: 6' x H: 0.1')
CIE Type: Semi-Indirect

Input Watts (W): 108.6
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT

TEST NUMBER: P938507

CATALOG NUMBER: SQ4-FB-150U-100D-B50-1D-UNV-W2A-W-6

Luminous Intensity Polar Plot



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COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

RF	20				20				20				20				20
RC	80				70				50				30				10
RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10
RCR																	
0	103	103	103	103	93	93	93	93	75	75	75	58	58	58	42	42	42
1	94	90	86	82	85	81	78	75	65	63	60	50	49	47	36	35	35
2	85	78	72	66	77	70	65	61	56	53	49	43	41	39	32	30	29
3	77	68	61	55	69	61	55	50	49	45	41	38	35	32	28	26	24
4	71	60	52	46	63	54	47	42	43	38	34	34	30	27	24	22	20
5	64	53	45	39	58	48	41	36	39	33	29	30	26	23	22	19	17
6	59	47	39	33	53	43	36	30	34	29	25	27	23	20	19	17	15
7	54	42	34	29	49	38	31	26	31	26	22	24	20	17	18	15	13
8	50	38	30	25	45	35	28	23	28	23	19	22	18	15	16	13	11
9	47	35	27	22	42	31	25	20	26	20	17	20	16	14	15	12	10
10	43	31	24	20	39	29	22	18	23	18	15	18	15	12	13	11	9

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	3561	3561	3561
5°	3478	4114	4787
10°	3153	5997	7935
15°	2679	7833	9582
20°	2180	9075	9766
25°	1818	9494	9567
30°	1532	9552	9549
35°	1354	9390	9796
40°	1179	9181	10051
45°	1067	9028	10090
50°	979	8889	9924
55°	935	8687	9484
60°	957	8302	8789
65°	994	7718	7834
70°	1057	6727	6618
75°	1166	5479	5165
80°	1266	3796	3481
85°	1103	2011	1781

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°

Vertical Angle: 45°

Luminance: 10090 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	74.5	0.6
10°-20°	330.0	2.6
20°-30°	577.3	4.5
30°-40°	743.1	5.8
40°-50°	830.0	6.4
50°-60°	795.0	6.2
60°-70°	630.0	4.9
70°-80°	370.5	2.9
80°-90°	107.9	0.8
90°-100°	634.7	4.9
100°-110°	1668.5	12.9
110°-120°	1730.1	13.4
120°-130°	1387.7	10.8
130°-140°	1088.9	8.4
140°-150°	835.8	6.5
150°-160°	601.9	4.7
160°-170°	368.3	2.9
170°-180°	124.4	1.0
0°-30°	981.8	7.6
0°-40°	1724.9	13.4
0°-60°	3349.9	26.0
0°-90°	4458.3	34.6
90°-120°	4033.3	31.3
90°-150°	7345.7	56.9
90°-180°	8440.0	65.4
0°-180°	12898.6	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	576	576	576	576	576	
5°	561	602	677	766	794	52
15°	420	776	1307	1584	1634	117
25°	268	879	1557	1625	1627	124
35°	181	840	1466	1549	1610	113
45°	124	670	1296	1484	1551	96
55°	89	426	1100	1277	1312	81
65°	70	226	816	918	931	70
75°	52	139	448	492	494	54
85°	18	43	111	122	124	20
90°	9	24	66	33	33	8
95°	84	329	1093	564	384	93
105°	301	455	1845	2801	2613	319
115°	534	648	1478	2947	3364	527
125°	743	833	1344	2271	2679	659
135°	885	974	1302	1833	2079	685
145°	1027	1092	1285	1564	1686	643
155°	1160	1193	1285	1411	1452	533
165°	1252	1269	1285	1336	1353	353
175°	1302	1302	1294	1311	1311	124
180°	1302	1302	1302	1302	1302	

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CANDELA DISTRIBUTION (FULL):

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
0°	575.6	575.6	575.6	575.6	575.6	575.6	575.6	575.6	575.6	575.6	575.6
2.5°	575.6	575.6	579.4	581.2	584.9	586.7	590.5	594.2	605.2	607.1	610.8
5°	560.9	568.2	592.3	601.6	627.5	662.7	677.4	701.5	751.5	766.3	775.6
7.5°	538.6	555.3	614.6	629.3	694.1	786.7	825.6	877.4	957.0	995.8	1027.3
10°	503.4	538.6	644.2	679.3	784.8	925.5	997.7	1069.9	1190.2	1243.9	1264.3
12.5°	464.6	522.0	675.7	723.8	875.5	1081.0	1168.0	1247.5	1384.6	1456.8	1467.9
15°	420.2	497.9	705.3	775.6	971.7	1210.6	1306.9	1404.9	1532.6	1584.4	1597.4
17.5°	381.4	479.4	733.0	807.1	1045.8	1327.2	1425.3	1506.7	1610.4	1645.5	1654.8
20°	333.2	449.8	751.5	847.8	1123.6	1412.3	1506.7	1569.7	1640.0	1662.2	1665.9
22.5°	298.0	418.3	762.6	862.5	1175.3	1464.1	1543.7	1593.7	1641.9	1649.3	1651.1
25°	268.4	383.1	760.7	879.3	1219.8	1495.6	1556.7	1593.7	1621.5	1625.2	1625.2
27.5°	240.6	344.3	753.4	882.9	1253.1	1503.0	1551.1	1577.1	1590.0	1597.4	1597.4
30°	216.6	307.3	734.9	875.5	1267.9	1495.6	1534.5	1547.5	1560.4	1571.5	1577.1
32.5°	198.1	272.1	707.0	860.7	1269.8	1477.1	1504.9	1512.2	1530.7	1556.7	1565.9
35°	181.4	237.0	675.7	840.3	1258.7	1447.5	1466.0	1473.4	1510.4	1549.3	1562.2
37.5°	164.8	211.0	634.9	805.2	1242.0	1412.3	1425.3	1438.3	1495.6	1541.8	1556.7
40°	148.0	188.8	586.7	766.3	1216.1	1369.7	1380.8	1401.2	1477.1	1530.7	1545.6
42.5°	135.1	170.3	534.9	725.6	1182.8	1321.6	1338.2	1367.8	1454.9	1512.2	1529.0
45°	124.0	151.8	479.4	670.1	1140.2	1271.6	1295.7	1336.5	1428.9	1484.5	1499.4
47.5°	112.9	138.8	422.1	612.7	1093.9	1221.7	1253.1	1299.4	1393.8	1447.5	1460.4
50°	103.7	125.9	364.6	551.6	1043.9	1168.0	1205.0	1253.1	1349.3	1399.3	1416.0
52.5°	96.3	114.8	310.9	490.5	986.6	1112.5	1155.0	1205.0	1295.7	1343.8	1355.0
55°	88.8	105.5	264.7	425.7	927.4	1053.2	1099.5	1147.6	1236.4	1277.2	1284.6
57.5°	85.2	98.1	225.8	364.6	864.4	986.6	1038.4	1082.9	1166.1	1197.6	1205.0
60°	79.6	92.6	196.2	312.8	796.0	923.6	968.1	1012.5	1082.9	1108.8	1114.3
62.5°	74.1	88.8	174.0	262.8	725.6	849.6	894.0	934.7	994.0	1012.5	1019.9
65°	70.3	85.2	157.4	225.8	653.4	771.9	816.3	851.4	899.6	918.1	921.8
67.5°	66.6	81.4	144.4	194.4	581.2	694.1	727.4	760.7	797.8	816.3	818.2
70°	61.1	77.7	133.3	172.1	507.2	605.2	633.1	668.2	697.8	707.0	712.6
72.5°	57.3	72.2	125.9	155.5	431.3	520.1	546.0	566.4	592.3	601.6	601.6
75°	51.8	64.8	118.4	138.8	353.5	425.7	447.9	468.3	488.7	492.4	486.8
77.5°	46.2	57.3	101.8	116.7	275.8	336.9	355.4	366.5	383.1	386.9	388.7
80°	38.9	50.0	79.6	90.7	199.9	248.1	261.0	270.2	285.1	285.1	288.8
82.5°	29.6	38.9	57.3	64.8	135.1	170.3	181.4	187.0	196.2	196.2	196.2
85°	18.5	24.1	37.0	42.6	81.4	103.7	111.1	112.9	120.3	122.2	122.2
87.5°	9.2	13.0	24.1	25.9	42.6	53.7	53.7	57.3	57.3	55.6	53.7
90°	8.8	15.8	22.7	24.5	38.5	57.1	66.4	59.0	44.3	33.3	33.3
92.5°	34.9	94.3	153.8	168.7	237.1	328.4	374.0	327.7	235.4	166.1	159.4
95°	83.9	192.6	301.4	328.6	583.5	923.3	1093.2	975.5	740.1	563.6	543.6
97.5°	145.1	241.0	336.9	360.9	785.9	1352.5	1635.8	1561.5	1412.7	1301.2	1263.0
100°	192.2	279.3	366.2	388.0	859.6	1488.3	1802.7	1808.1	1819.1	1827.2	1781.9
102.5°	232.5	313.6	394.8	415.1	893.4	1531.0	1849.9	1944.6	2134.1	2276.3	2237.4
105°	300.6	369.3	438.0	455.2	918.4	1535.9	1844.6	2057.0	2481.9	2800.6	2779.7
107.5°	370.5	434.6	498.7	514.6	923.0	1467.5	1739.8	2036.1	2628.7	3073.2	3078.3
110°	417.7	475.6	533.4	547.9	916.1	1406.9	1652.3	1983.6	2646.2	3143.1	3164.9

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CATALOG NUMBER: SQ4-FB-150U-100D-B50-1D-UNV-W2A-W-6

CANDELA DISTRIBUTION (continued):

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
112.5°	464.0	519.1	574.2	588.0	916.3	1354.0	1572.9	1911.9	2590.0	3098.5	3132.0
115°	533.9	584.8	635.7	648.4	924.8	1293.3	1477.6	1804.2	2457.4	2947.3	2993.7
117.5°	602.9	649.1	695.4	706.9	942.0	1255.4	1412.1	1706.9	2296.3	2738.5	2789.9
120°	643.2	686.7	730.2	741.0	955.9	1242.6	1385.9	1655.2	2193.9	2597.8	2647.7
122.5°	682.5	726.4	770.3	781.2	976.0	1235.9	1365.8	1608.3	2093.4	2457.2	2506.4
125°	742.7	782.7	822.8	832.8	1003.1	1230.4	1343.9	1550.0	1962.0	2271.0	2316.3
127.5°	791.7	832.0	872.4	882.5	1030.2	1227.1	1325.5	1502.4	1856.2	2121.6	2159.9
130°	817.9	861.4	905.0	915.8	1050.1	1229.1	1318.6	1476.1	1791.0	2027.2	2062.6
132.5°	845.0	888.5	932.0	942.9	1066.1	1230.4	1312.5	1453.4	1735.4	1946.8	1978.5
135°	885.2	924.8	964.4	974.3	1083.5	1229.1	1302.0	1420.1	1656.2	1833.3	1860.5
137.5°	926.2	965.5	1004.7	1014.5	1109.8	1236.7	1300.2	1400.1	1599.7	1749.4	1771.7
140°	960.3	996.5	1032.5	1041.6	1125.8	1238.0	1294.2	1380.4	1552.8	1682.1	1703.0
142.5°	986.5	1019.9	1053.4	1061.7	1139.2	1242.5	1294.2	1369.9	1521.3	1634.9	1652.8
145°	1026.7	1055.9	1085.0	1092.3	1156.7	1242.5	1285.4	1347.3	1471.2	1564.2	1577.7
147.5°	1066.9	1095.3	1123.6	1130.7	1182.3	1251.0	1285.4	1334.1	1431.5	1504.7	1516.0
150°	1093.2	1118.7	1144.3	1150.8	1195.6	1255.5	1285.4	1326.6	1408.8	1470.6	1479.7
152.5°	1120.2	1139.7	1159.1	1164.0	1204.4	1258.4	1285.4	1320.5	1390.8	1443.5	1450.4
155°	1160.4	1174.8	1189.2	1192.7	1223.6	1264.8	1285.4	1313.3	1369.2	1411.2	1415.8
157.5°	1190.1	1204.1	1218.1	1221.6	1242.9	1271.2	1285.4	1307.1	1350.7	1383.3	1386.4
160°	1210.3	1221.1	1231.9	1234.7	1251.6	1274.1	1285.4	1304.1	1341.3	1369.2	1371.1
162.5°	1230.4	1238.5	1246.6	1248.7	1260.9	1277.2	1285.4	1301.1	1332.5	1356.2	1357.9
165°	1252.2	1259.6	1266.9	1268.7	1274.3	1281.6	1285.4	1296.7	1319.2	1336.1	1338.0
167.5°	1272.3	1275.8	1279.3	1280.1	1284.8	1291.1	1294.2	1301.5	1316.3	1327.3	1328.1
170°	1285.4	1288.8	1292.4	1293.2	1293.5	1294.0	1294.2	1301.5	1316.3	1327.3	1327.3
172.5°	1292.4	1293.1	1294.0	1294.2	1294.2	1294.2	1294.2	1299.9	1311.6	1320.3	1319.6
175°	1302.0	1302.0	1302.0	1302.0	1299.4	1295.9	1294.2	1297.8	1305.2	1310.7	1310.7
177.5°	1302.0	1302.0	1302.0	1302.0	1299.9	1297.2	1295.8	1298.7	1304.6	1309.0	1308.3
180°	1302.0	1302.0	1302.0	1302.0	1302.0	1302.0	1302.0	1302.0	1302.0	1302.0	1302.0

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CANDELA DISTRIBUTION (continued):

	80°	90°
0°	575.6	575.6
2.5°	614.6	610.8
5°	790.4	794.1
7.5°	1064.3	1062.5
10°	1323.5	1340.1
12.5°	1512.2	1516.0
15°	1627.0	1634.4
17.5°	1671.5	1673.3
20°	1673.3	1669.6
22.5°	1652.9	1649.3
25°	1628.9	1627.0
27.5°	1606.7	1608.5
30°	1597.4	1602.9
32.5°	1597.4	1606.7
35°	1601.2	1610.4
37.5°	1599.3	1610.4
40°	1591.8	1604.8
42.5°	1571.5	1580.8
45°	1540.1	1551.1
47.5°	1499.4	1506.7
50°	1447.5	1454.9
52.5°	1382.7	1384.6
55°	1305.0	1312.4
57.5°	1221.7	1223.5
60°	1129.1	1134.6
62.5°	1031.0	1031.0
65°	927.4	931.0
67.5°	820.0	829.2
70°	710.8	712.6
72.5°	603.5	603.5
75°	492.4	494.2
77.5°	386.9	386.9
80°	286.9	288.8
82.5°	198.1	201.7
85°	124.0	124.0
87.5°	57.3	51.8
90°	33.3	33.3
92.5°	133.0	106.6
95°	463.5	383.6
97.5°	1110.8	958.6
100°	1600.5	1419.1
102.5°	2082.1	1926.7
105°	2696.2	2612.7
107.5°	3098.5	3118.6
110°	3251.8	3338.9



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CANDELA DISTRIBUTION (continued):

	80°	90°
112.5°	3265.5	3399.1
115°	3178.9	3364.2
117.5°	2995.3	3200.8
120°	2847.4	3047.0
122.5°	2703.3	2900.2
125°	2497.7	2679.1
127.5°	2312.9	2465.9
130°	2204.0	2345.3
132.5°	2105.0	2231.7
135°	1969.7	2078.8
137.5°	1861.1	1950.4
140°	1786.5	1870.0
142.5°	1724.7	1796.5
145°	1632.1	1686.4
147.5°	1561.0	1606.1
150°	1516.3	1552.8
152.5°	1478.0	1505.6
155°	1434.0	1452.3
157.5°	1399.3	1412.1
160°	1378.5	1385.9
162.5°	1364.9	1371.9
165°	1345.2	1352.6
167.5°	1331.2	1334.3
170°	1327.3	1327.3
172.5°	1316.9	1314.2
175°	1310.7	1310.7
177.5°	1305.1	1302.0
180°	1302.0	1302.0

(END OF REPORT)